

T (314) 872 9058 F (314) 872 8686

#### Resume

Dennis W. Sagez, P.E. PMP

## **Summary**

Forty years experience in process control, electrical engineering, design and project management primarily in the chemical process, electric utility and refining industries.

#### Education

1974 BSME Washington University, St. Louis, Mo. (21 hours Electrical Engineering)

## **Professional Registration**

Missouri Professional Engineer - No. E-18432 Illinois Professional Engineer - No. 062-043977 PMP Number 1309018

## **Experience and Accomplishments**

1987 - Present

Emerson Process Management Senior Project Manager, Principal Engineer Functioned as Project Manager, and lead engineer on a number of projects as described below:

# Refineria Dominicana de Petroleo, Dominican Republic

Directed all aspects of project in which Emerson functioned as the MAC. Integrated hardware engineering and panel fabrication (St. Louis, USA), software development and DeltaV configuration (EPM, Venezuela), and installation contractors (Dominican Republic) into a successfully executed fast track project. Converted 2 boilers, 2 DI Water units and approximately 30% of the refinery control loops to DeltaV. Replaced existing pneumatic and electronic transmitters and positioners with Foundation Fieldbus devices.

#### British Petroleum, Whiting Indiana

Served as Project Manager for BP's Whiting VRU reinstrumentation project. Emerson functioned as the MAC, providing control hardware, fieldbus devices, infrastructure replacement design, control network design, DeltaV configuration and interface to

Process Solutions LACI Exhibit 1.1

several 3<sup>rd</sup> party software packages and devices.

#### Ameren UE

Functioned as Emerson Project Manager and lead engineer for several Ameren UE & Ameren CIPS projects including coal and ash handling automation projects, boiler and water system control upgrades, fuel conversions (including combustion turbine installations, coal and gas burner management system design, etc.

#### Praxair Inc.

Functioned as Emerson Project Manager for a \$3M 2500 DST DeltaV project controlling a Praxair Hydrogen plant. Plant was designed to use a refinery offgas stream or methane as feedstocks. Project designed and fabricated a 12'x60' RIE to house all control hardware; facilitating an integrated FAT at Emerson facilities, while minimizing site installation time, cost and risk.

## Baxter Pharmaceutical, Puerto Rico

Provided project definition, project management, electrical and control system hardware design for a large DCS migration project, converting Moore to DeltaV.

# SIS Projects

Functioned as project manager on several projects, delivering Safety Instrumented Systems per IEC 61511 for several clients including:

BP

Nalco

Eastman Chemical

ConocoPhillips

### Cabot Corporation

Re-instrumentation of Carbon Black Plant Process Control Design using nine Allen-Bradley PLC 5/15s interfaced to PRoVOX distributed control system. Provided controls for the reactor safety interlock and Burner Management system. Specified flow metering instruments, control valves, and relief valves. Developed P & ID's, control strategies, loops, I/O schematics, and instrument installation details.

1974-1986

Senior Engineer - Monsanto Company Corporate Engineering Department

Performed lead engineering assignments on a number of chemical and petrochemical industry projects as described below:

# Air Emissions Abatement - Pensacola, FL

Lead Engineer with responsibility for Process Control and Electrical design, construction direction, checkout, and startup. Installed new Fisher PRoVOX distributed control system.

## AN Plant – Chocolate Bayou, Texas

Provided electrical and control system engineering required to install process heat recovery units. Included existing process control modifications and new control schemes.

# Boiler 4 & 5 Control and Burner Management System- Texas City, TX

Process Control & Electrical Engineering Design checkout and startup. Project installed analog controls to optimize boiler efficiency and permit multiple fuel options. Designed and tested new burner management systems allowing the site to burn waste hydrocarbon streams in their steam boilers rather than flare stack.